

REMARKS

A minor amendment of a grammatical nature is made to claim 37. Claims 21-31, 42, and 44 were previously canceled. The pending claims are claims 1-20, 32-41, 43, and 45.

35 U.S.C. §103(a) Rejections

The Examiner rejected claims 1-4, 9-18, 32, 37, 40, 41, and 45 under 35 U.S.C. §103(a) as being unpatentable over Morin, U.S. Patent no. 6,584,312, in view of Clapton, U.S. Patent no. 6,556,823. Applicant respectfully disagrees.

Claim 1 recites the following:

A method, comprising:

detecting a change in subscription information of a subscriber;

checking whether a capability of a network element serving a terminal device of said subscriber is still in accordance with said changed subscription information; and

initiating, in response to a result of said checking being that said capability of said network element serving said terminal device of said subscriber is not still in accordance with said changed subscription information, a registration procedure for registering said terminal device of said subscriber to a new serving network element that is in accordance with said changed subscription information.

Applicant reads Morin as disclosing a system where when a MS (mobile station) registers to an MSC (mobile switching center), the MSC checks from HLR (home location register) whether the MSC capabilities corresponds to subscribed capabilities. See, e.g., FIG. 3 and messages 308 and 310 and col. 4, lines 35-45 in Morin. In case the MSC does not fully support a capability, the HLR modifies copy of the subscriber profile corresponding to the MS and sends the modified copy to the MSC and “the closest” services are provided to the MS. See col. 4, lines 46-67.

Thus in Morin in response to a register request from the terminal, the HLR checks if the MSC is capable of serving the MS and if not, the subscription information is changed so that the MSC can serve the MS.

An exemplary difference with the instant case and claims is that the terminal is already registered to a network element in the instant claims, and then at some point while the terminal device is registered to the network element, the subscription information changes and the terminal may receive more services than the terminal should receive according to the new subscription information or the terminal may receive less services than the terminal should receive according to the new subscription information, that is, problems may arise. Registration to a new serving network element is therefore initiated.

By contrast, in Morin, there is no implication that a registration to a new serving network element would ever be initiated, since the HLR in Morin simply modifies a copy of the subscriber profile in order to allow the MSC to provide access to services to the MS. Thus, there is no motivation to register to a new MSC in Morin, since the changed subscription information makes sure that registration to the initial MSC is successful. In conclusion, in instant case and claims the registration is a consequence of changed subscription information, but in Morin it is the other way around: the change of the subscription information is a consequence of registration. Thus given the embodiments of Morin, a skilled person in the art would not initiate a registration to a new serving network element (MSC), since the subscription change was specifically for the purpose for making the subscriber to be served by the MSC. In case of Morin, if a new serving network element would be chosen, there wouldn't be need to change the subscription information.

Also, usually at the time of the invention of Morin, usually it was not even possible to have alternative MSCs and make a registration to a new serving network element (MSC), since in the circuit-switched domain, usually it would have been a single MSC of an operator serving an area.

Since there is no implication that a registration to a new serving network element would ever be initiated in Morin, there is no reason for one skilled in the art to

combine Morin with Clapton. Therefore, the §103(a) rejections to the independent claims (such as claim 1) should be withdrawn.

Regarding, Clapton, what Clapton states is the following:

If the subscriber has roamed to the visited network 3, the mobile switching centre 3-1 will either not recognise the dialled 901 as meaningful, or it will discover that the subscriber is not entitled to the service provided by the visited network 3 in response to this number. (Even if both networks use the code 901 for voicemail access, the code, when used on the visited network, will give access to the voicemail service 3-10 of the visited network, on which the user 1-9 has no mailbox). When the mobile switching centre 3-1 identifies such a number, the mobile switching centre 3-1 then reads the subscriber's record from the visitor location register 3-2, including the second service marker (step 41). The mobile switching centre 3-1 then notifies the home network's mobile service control point 1-6 of the services indicated by the second service marker, the number dialled and the subscriber's identity (step 42). The mobile service control point 1-6 determines that the dialled number is the voice mail access number of the home network 1 and returns to the mobile switching centre 3-1 the address of the subscriber's voice mail box 1-10 (step 43). The mobile switching centre 3-1 then calls the identified voice mail box 1-10 (step 47) which then returns the subscriber's voice mail for transmission to the mobile station 1-9. Thus, the subscriber is able to access his voice mail when roaming on another network 3, using exactly the same dialling procedure as when he is registered with his home network 1.

Clapton, col. 8, lines 22-47. In this situation, the mobile subscriber is simply at the visited network 3 (see FIG. 1 below of Clapton):

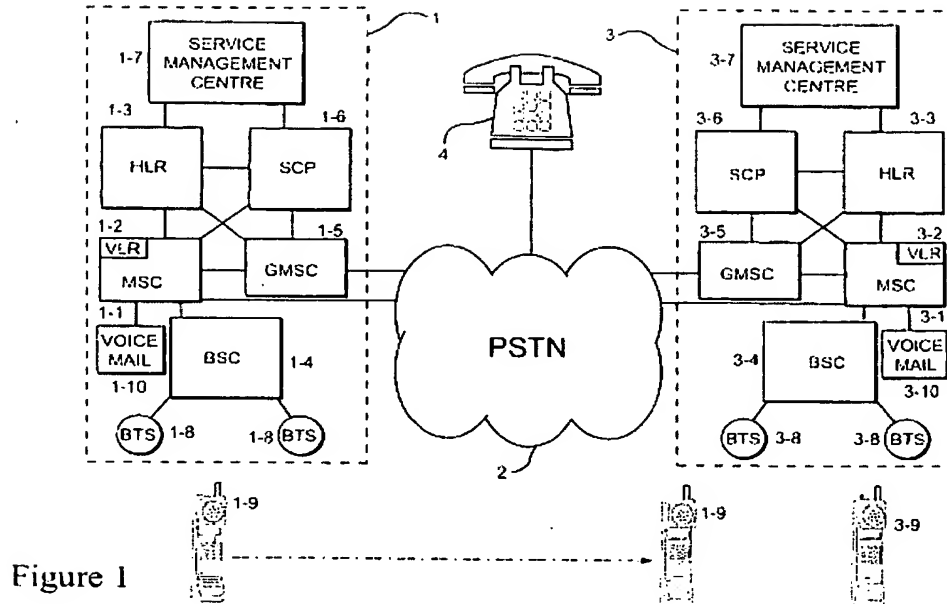


Figure 1

In the scenario described above in Clapton, the MS 1-9 never leaves the visited network 3. That is, the MS 1-9 remains “registered” to the MSC 3-2 (from the visited network 3) and no attempt is made to initiate a registration process with the MSC 1-2 (from the home network 1).

The MSC 3-2 in the visited network 3 “notifies the home network's mobile service control point 1-6 of the services indicated by the second service marker, the number dialled and the subscriber's identity (step 42).” But it is clear that the MSC 3-2 still remains the provider of services to the MS 1-9 when the MS is roaming on the visiting network 3: “The mobile switching centre 3-1 then calls the identified voice mail box 1-10 (step 47) which then returns the subscriber's voice mail for transmission to the mobile station 1-9. Thus, the subscriber is able to access his voice mail when roaming on another network 3, using exactly the same dialling procedure as when he is registered with his home network 1.” The previous sentence does state “using exactly the same dialling procedure *as when he is registered with his home network 1*”, but there is no indication the subscriber/MS 1-9 is actually registered with the MSC 1-2 while the subscriber/MS 1-9 is roaming on the network 3.

Applicant can find no disclosure in other sections of Clapton of the subject matter of “initiating, in response to a result of said checking being that said capability of said network element serving said terminal device of said subscriber is not still in accordance with said changed subscription information, a registration procedure for registering said terminal device of said subscriber to a new serving network element that is in accordance with said changed subscription information”. Because the Examiner admits this subject matter is not disclosed in Morin and Applicant has shown this subject matter is not disclosed in Clapton, the combination of Morin and Clapton does not disclose this subject matter. Therefore, the §103 rejections to claim 1 should be withdrawn.

Claim 32 recites “detecting a change in a subscription information of a subscriber; and “initiating a registration procedure for registering a terminal device of said subscriber to a new serving network element in response to a result of a checking operation that has checked whether a capability of a network element serving said terminal device of said subscriber is still in accordance with said changed subscription information and that has determined said result is that said capability of said network element serving said terminal device of said subscriber is not still in accordance with said changed subscription information, and wherein said new serving network element is in accordance with said changed subscription information.” Claim 32 is therefore patentable based at least on the arguments presented above with respect to claim 1.

Regarding claim 45, this claim recites “code for detecting a change in subscription information of a subscriber”, “code for checking whether a capability of a network element serving a terminal device of said subscriber is still in accordance with said changed subscription information”, “code for initiating, in response to a result of said checking being that said capability of said network element serving said terminal device of said subscriber is not still in accordance with said changed subscription information, a registration procedure for registering said terminal device of said subscriber to a new serving network element that is in accordance with said changed subscription information.” Claim 45 is therefore patentable based at least on the arguments presented above with respect to claim 1.

Independent claim 40 recites “checking whether a capability of a current serving network element serving a terminal device of a subscriber is still in accordance with a change in subscription information” and “in response to a result of the checking indicating the capability of the current serving network element serving the terminal device of the subscriber is not still in accordance with the change in subscription information, performing a registration procedure for registering said terminal device to a new serving network element that is in accordance with the change in subscription information.” Claim 40 is therefore patentable based at least on the arguments presented above with respect to claim 1.

Regarding independent claim 37, this claim recites “registering to a serving network element providing session control services for said apparatus, receiving a de-register message containing a cause information, which indicates a reason for the de-register message, the reason indicating that a result of a checking operation for checking a capability of the serving network element indicates that the capability is not in accordance with a change in subscription information of a subscriber associated with the apparatus”, and “in response to said de-register message, initiating automatically a new initial registration procedure for registering said apparatus to a new serving network element providing session control services for said apparatus, wherein the new serving network element is in accordance with said changed subscription information.”

In addition to the reasons given above with respect to claim 1, this claim 37 involves de-registering from one serving network element and initiating a new registration procedure to register to a new serving network element. As stated above, since there is no implication that a registration to a new serving network element would ever be initiated in Morin, there is no reason for one skilled in the art to combine Morin with Clapton. Therefore, the §103(a) rejections to independent claim 37 should be withdrawn.

Neither Morin nor Clapton disclose or imply a de-register message (since neither deals with re-registration and re-registration) and performing actions responsive to the de-registration message. Therefore, the combination of Morin and Clapton does not disclose

this subject matter, and claim 37 is patentable over the (alleged) combination of Morin and Clapton.

Thus, independent claims 1, 32, 37, 40, 41, and 45 are patentable over the (invalid) combination of Morin and Clapton. Because these claims are patentable, their dependent claims 2-4, 8-18 are patentable for at least the above reasons.

Applicant respectfully requests the §103 rejections to claims 1-4, 9-18, 32, 37, 40, 41, and 45 be removed.

35 U.S.C. §103(a) Rejections

The Examiner rejected claims 5-8, 19, and 20 under 35 U.S.C. §103(a) as being unpatentable over Morin in view of Clapton and in further view of Denenberg, U.S. Patent no. 6,859,649. Because independent claim 1 is patentable, its dependent claims 5-8, 19, and 20 are patentable for at least the reasons given above.

The Examiner rejected claims 38 and 39 under 35 U.S.C. §103(a) as being unpatentable over Morin in view of Clapton and in further view of Wang, U.S. Patent Publication no. 2002/0131395. Because independent claim 37 is patentable, its dependent claims 38 and 39 are patentable for at least the reasons given above.

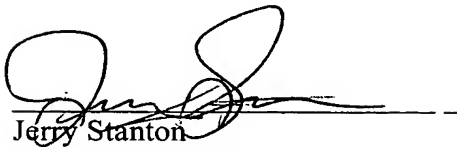
Applicant respectfully requests the §103 rejections be removed.

Conclusion

Based on the foregoing arguments, it should be apparent that all remaining claims are thus allowable over the reference(s) cited by the Examiner, and the Examiner is respectfully requested to reconsider and remove the rejections. The Examiner is invited to call the undersigned attorney for any issues.

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